Warren (g. S,)

TWO CASES OF INTUSSUSCEPTION

SUCCESSFULLY TREATED BY

FLUID INJECTIONS.

BY

JOHN S. WARREN M D.

PHYSICIAN TO DEMILT DISPENSARY, DEPARTMENT FOR WOMEN.



REPRINTED FROM THE NEW YORK MEDICAL JOURNAL

NEW YORK:
D. APPLETON AND COMPANY,
549 & 551 BROADWAY.
1875.

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TWO CASES OF INTUSSUSCEPTION SUCCESS-FULLY TREATED BY FLUID INJECTIONS.

The comparative infrequency of the occurrence of invagination of the intestine in ordinary practice, and the difficulty attendant almost always in recognizing the accident when it has occurred, on account of the absence or the obscurity of the few decisive symptoms necessary to complete a diagnosis, have induced me to relate the two following cases which have come under my observation.

Both were so plainly characteristic of the presence of intussusception, as distinguished by the most recent writers upon that subject, from other forms of intestinal obstruction, as to leave no reasonable doubt in my mind of the positive existence of such a condition.

The success, too, of the treatment pursued, although not in the least new or original, was particularly remarkable in the first instance, in consideration of the age of the patient, and the extreme exhaustion that had resulted from the long continuance of the distressing symptoms prior to and after the use of the appropriate remedy was commenced.

J. McE., a healthy male child, seven months old, who had previously enjoyed good health, and been nourished entirely upon breast-milk, but troubled from birth with constipation, was suddenly taken sick in April, 1873, with severe colicky

pains, accompanied with severe nausea and vomiting.

A physician was soon called, who decided, after a careless examination, that he was suffering only from colic, from his habitual constipation, and ordered a large dose of castor-cil immediately; but the mother soon discovered that this treatment only aggravated the child's sufferings, and that he grew worse, the vomiting and tenesmus increasing, with an occasional passage of blood and mucus.

On the third day I was sent for, and was informed by the father, before leaving my office, that the child could not get a natural passage from the bowels, and that only blood passed away. At once suspecting that it might be a case of intussusception, I took with me a Davidson syringe, for use if my suspicions should prove to be correct.

I found the little patient, on my first visit, extremely prostrated, countenance pale, lips livid, and the skin cold and clammy; he seemed to have great pain in the abdomen, which came on every twenty or thirty minutes, in paroxysms, and increased in intensity until he vomited, when he appeared relieved a little, or at least so faint and sick as not to scream; during the intervals when free from pain he would occasionally try to nurse, but the same symptoms came on, and then he became inclined to do so less frequently.

On examination of abdomen I found it soft and flabby to the touch, but no tumor was detected; but the introduction of my finger into the rectum revealed a smooth, rounded lump completely closing the upper portion of the gut; this I considered to be a positive verification of my diagnosis, and, accordingly, I began to inject the bowel with warm soap-andwater; this was repeated several times, but with no result, except the rejection of the water, considerably colored with blood at first, but finally nearly clear.

I then desisted, as the tenesmus, which had been occasional during the day, seemed to be increased by the enema. Then directing tinct, opii camph, to be given in doses sufficient to allay pain and to quiet the peristalsis of the intestines, I left the child until evening, when I again repeated the injections, but with no better success. On the following day, being detained by another patient, I did not make my first visit as early, by an hour or two, as I had intended, and, when I arrived, to my surprise I found Dr. A. S. Church, of this city, examining my patient, and, noticing very great embarrassment on the part of the mother, I asked for an explanation, when we were informed that, after the first physician had been discharged, they (the parents), in their anxiety for the recovery of their baby, had deemed it necessary to have two doctors in attendance; not in consultation, however, but to

come in each other's absence, and to be led to understand that we were each in the sole charge of the case.

And this experience *en passant* is not, I suspect, new to a large number of physicians practising in New York and elsewhere, especially in their dealings with the poorer and more ignorant class of their patients.

I soon learned that Dr. Church had been in attendance about the same time as I had, and that he, too, had both recognized the accident that had happened to the patient, and was pursuing a similar treatment.

Accordingly, after a short consultation, we decided to again repeat the enemata, although we both had but little expectation of its efficacy, it being now the fourth day of attack, and the child having, of course, become very much weaker as the time from the inception of the trouble grew longer.

And now, with the child's chest resting upon the arm of a lounge, and the hips supported by Dr. Church, who also compressed the nates against the nozzle of the syringe, I commenced injecting tepid soap-and-water; but, for several minutes after, the irritation produced by the action of the syringe caused a tenesmus, and the expulsion of nearly all the fluid; though, by a steady persistence, and a very careful manipulation of the instrument, the straining grew less and less, the child became soothed, and finally fell into a short slumber, and I had succeeded in injecting ten or twelve ounces, which was retained.

As then, by mutual agreement, Dr. Church assumed charge of the patient, I did not visit him again, but was informed soon after by the doctor that, when he saw him the next day, he found him completely relieved of all unfavorable symptoms, and later that he had completely recovered.

John M., a healthy, well-developed male child, nine months old, nursing, who had been generally well since birth, but had been always constipated, was suddenly seized with vomiting and retching on Saturday, January 16, 1875, while sitting in his mother's lap at the dinner-table (1 p. m.), which continued at intervals of perhaps every half-hour or longer during the afternoon.

I was sent for, and saw him just before night, when the

mother informed me that she feared an attack of scarlatina, or diphtheria, as the glands (submaxillary) on right side were considerably swollen; on examining the throat internally, I found no evidences of congestion or inflammation, except that the mouth seemed hot and tender from the approach of two incisor-teeth. No fever, temperature normal; the only symptom apparent during my visit was an occasional fretful and uneasy movement whenever I pressed my fingers against the swollen gland or in the mouth. I concluded that this symptom was due only to the condition of the gums and throat, especially after learning that a natural movement of the bowels had occurred in the morning; and, after prescribing small doses of bromide of potash, with a carminative, I left.

Later in the evening a messenger came to tell me that the vomiting, which had for a time subsided, had recommenced, and was quite violent and frequent. For this, ordered powders of bismuth, and promised to see him in the morning. On the next day (Sunday) he was very much better; the vomiting was greatly relieved, and, in fact, had almost entirely disappeared. He was inclined to play a little, but would still, at times, move about as if in pain. As he had had no movement of the bowels since the previous morning, I ordered an enema of tepid water, and again left him.

At a late hour that night I was sent for to go immediately, as the child was very much worse than at any time during his illness. On my arrival the mother informed me that after my departure she had given the injection as ordered, and that it was followed by quite a large quantity of blood, mixed with a very little fecal matter, and after that, for a while, he seemed much relieved; but during the afternoon he again became restless and vomited several times, and from about seven in the evening, until I arrived at 11 P. M., he had grown rapidly worse, vomiting at much shorter intervals, writhing and crying as if in intense pain. My attention was almost immediately directed by the mother to a swelling in the abdomen, a distinct tumor just above the umbilicus, quite large and hard to the touch, which had attracted her attention only during the past few hours, and had been remarked upon voluntarily by a lady friend present with her.

This, together with the passage of blood in the morning, at once suggested to my mind intussusception. The patient was looking very pale and prostrated, the pulse was quick and feeble, and the skin cold. I at once determined to use fluid injections, and, with the little patient placed in a semi-prone position in his mother's lap, with an ordinary Davidson syringe I commenced injecting tepid soap-and-water, but after perhaps a gill had been thrown into the rectum it was almost immediately rejected, very highly colored with blood, and mixed with it a very small quantity of mucus and fecal matter; the latter, by the way, not hardened, but of the consistency of soft putty. In a second attempt the fluid was retained longer, but was after a little while discharged, with more blood and mucus, but with much less tenesmus and pain.

When, soon after, I made my third attempt, the childs' chest was rested upon the side of its mother's lap, with lower extremities elevated by an assistant, so that the position was at an angle of about 45°, anus upward. This time I injected the fluid very slowly, in order to avoid, if possible, the irritation caused generally by the frequent emptying and refilling of the syringe (which, by-the-way, is a very serious hinderance to the successful use of this syringe, and which renders it much inferior to the fountain or hydrostatic). In this manner I succeeded in injecting, as I estimated at the time, perhaps ten or twelve ounces, and during the operation the child gradually became more quiet, and had, when I ceased, fallen asleep. Then, with the direction that occasional doses of tinct. opii camph. should be administered during the night, to control, if possible, the peristaltic action of the intestines, I left him.

On the following morning, to my surprise, I found the child sleeping quietly and naturally, and I was informed that at about 5 A. M. (six hours after my visit) he had a movement of the bowels, which was saved for my inspection, and consisted simply of the enema, slightly colored with fecal matter. From that time he seemed to be entirely free from pain, and six or seven hours later had a natural passage, after which recovery progressed rapidly, and in a few days he was discharged well.

These I look upon as very good specimen cases of true inflammatory intussusception, and are the only cases that I have ever met with where the symptoms were sufficiently clear to warrant an absolute diagnosis of this derangement, with one exception. Some two years since, through the kindness of my friend Dr. B. F. Dawson, of this city, I saw in an infant about seven months old, which had been brought to his class for children in Demilt Dispensary, a condition similar to that described in my first case, viz., where the invaginated intestine could be plainly felt by a rectal examination; unhappily, however, in this instance the child was almost moribund at the time, and all ordinary treatment proved unavailing.

As an intussusception of the bowels cannot, perhaps, in some obscure cases, be satisfactorily determined by positive signs during life, and is only discovered after a post-mortem examination, yet, to my mind, in the larger proportion the symptoms are almost unmistakable to any careful observer. The sudden seizure; the early nausea and vomiting; the obstinate constipation; the pain and tenesmus; the tumor in the abdomen, and occasionally in the rectum; and, above all others, the passage of blood per anum—these symptoms may indeed be present in many other diseases; but when we find them combined together, and particularly when the last-mentioned symptom (the hæmorrhage from the bowels) is present, I think we cannot fail to diagnosticate intussusception.

The prognosis in this disease is, by the most prominent authorities who have written elaborately upon the subject, conceded to be highly unfavorable. One of the earliest practical writers, Mr. Gorham ("Guy's Hospital Reports," vol. iii., 1838) says that while the non-inflammatory variety is obscure in its symptoms, and is never serious, the inflammatory invagination is highly dangerous, and very frequently fatal, though in some cases recoveries have occurred by sloughing, as also by inflation by air. Dr. J. L. Smith, in a recent exhaustive paper (Journal of the Medical Sciences, 1862), says that "it is so grave an accident, that a physician when called to a case should always predict a fatal termination; and infants with intussusception other than in the simple form almost invariably die. We cannot with any reason expect recovery except through sloughing and the expulsion of the displaced intes-

tine;" and in his collection of fifty cases is the record of seven cases which resulted favorably in this way.

Other authors, and among them Dr. West ("Diseases of Children"), speak less decidedly as to the fatality of the disease, and remark that, besides terminating by sloughing and separation, spontaneous resolution may sometimes occur and the intestines be completely restored. A similar result has happened in Dr. West's own practice, and in other cases on record, following inflation by air or water.

It is my own conviction, however, that we should in no case trust to Nature for a cure, but in every instance, with a steady persistence, use every means at our command to restore the strangulated intestine.

As to treatment, it is now acknowledged by those experienced in this disease, and who have a knowledge of the anatomy of the parts affected, that all medication, save opiates or other sedatives, to relieve pain, and quiet the peristaltic action of the bowels, does most serious harm; and the only reasonable and scientific means at our command consists in injections of air or fluids.

The first of these methods, although used and advocated at a very early period, has not been often practised until within the past thirty or forty years, during which time a number of well-authenticated cases have been put on record as cured by this means; among them I will refer to the case of Dr. Janeway, of New York (Journal of the Medical Sciences, 1833); others by Mr. Gorham ("Guy's Hospital Reports," 1838); two cases by Dr. Greig (London Medical Journal, 1864); and others, all of whom have claimed great and decided advantages for this means over the injections of fluids-advancing as arguments its ease and simplicity of application, entire harmlessness, and an absence of irritation, which the use of fluids produces when injected into a sensitive rectum. Having never used it, I am only able to say that others, perhaps equally prominent as authority, assert the superiority of fluids over air.

Some authors, and Dr. Brinton especially, allege that inflation by air may in many cases be productive of very great injury to the patient. Be this as it may, I only wish to tes-

tify to the happy and very unexpected success which has attended the use of fluid injections in my hands; and, in conclusion, also to express my belief that, in the administration of this remedy, two rules essential to success should always be remembered, viz., a persistence in its repetition, and the proper position for the patient. For the last I am indebted to Dr. Stephen Rogers, of this city, after the perusal of his valuable contribution on intussusception ("New York State Medical Transactions," 1872), wherein he says: "As the power with which to force back the displaced bowel to its normal position, fluid can have no dissimilar effect to that produced by air or gas, unless the weight of the fluid be applied as a factor. But, if the position of the body be so changed from the horizontal as to elevate the rectum as far above the obstruction as possible, it is readily seen how hydraulics will apply more force at the point of obstruction than at any other."

Again, in advocating persistence, I wish to be understood to urge repeated trials, even if at first the presence of the injection excites spasmodic action of the bowels, and it is entirely rejected. For, in many instances, I believe that frequently after two or three attempts, and when the intestine has become completely emptied of what little fecal substance, blood, and mucus, may exist below the obstruction, we may in many cases, by a careful and slow manipulation of the fluid, succeed in its retention when we might otherwise fail. In the preceding cases, at least, I feel sure that life has been saved by the observance of such rules.



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